A New Species of *Erica* (Ericaceae) from South Africa

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ABSTRACT. A new species of *Erica* from the Western Cape Province of South Africa is described and illustrated. Its probable affinities and known distribution and habitat are discussed. *E. hebdomadalis* is a low, spreading species with small, white pendulous flowers and is restricted to the highest altitudes of the eastern Klein Swartberg near Ladismith.

Erica hebdomadalis E. G. H. Oliver & I. M. Oliver, sp. nov. TYPE: South Africa. Western Cape: 3321AD, Ladismith, Klein Swartberg, N slopes of Hoeko Peak, 2040 m, 3 Feb. 1992, *Oliver 10005* (holotype, NBG; isotypes, BM, K, MO, PRE). Figure 1.

Species *Ericae demissae* Klotzsch ex Bentham affinis sed habitu prostrato, floribus pendulis, corolla late cyathiformi glabra, antheris manifestis non exsertis, stigmate manifesto non exserto differt.

Shrublet, low sprawling, fairly dense, up to 0.25 m high, single-stemmed reseeder. *Branches*: numerous main branches, each branch with 4–6 secondary branchlets 5–15 mm long, all terminating in a pendulous inflorescence, all densely pubescent with retrorse simple hairs, occasionally interspersed with retrorse, stouter, plumose, nonsticky gland-tipped hairs. *Leaves* 3-nate, erect, imbricate, 2.0–2.5 × 0.5 mm, oblong to lanceolate, adaxially flattened, abaxially rounded and narrowly sulcate, edges acute and entire, glabrous, edged with reddish, small, nonsticky, very short-stalked glands in young leaves only; petiole 0.4 mm long, appressed, glabrous, edged with small sessile glands. *Inflorescence*: flowers 3-nate in 1 or 2 whorls, umbel-like and terminal on main and secondary branches; pedicel 1–2 mm long, glabrous except for a few scattered, short-stalked, nonsticky gland-tipped hairs and rarely with some simple hairs; bract recaulescent and approximate to the calyx, 1.1–1.6 × 0.4 mm, oblanceolate, as long as sepals, adaxially rounded and narrowly sulcate for ⅓ its length, glabrous, white, occasionally tinged green, glands as in leaf; bracteoles 2, approximate, 1.0 × 0.3 mm, otherwise like the bract. *Calyx* 4-partite, appressed to corolla; segments 1.1 × 0.4 mm, narrowly ovate-attenuate, abaxially rounded and narrowly sulcate about ⅓ their length, glabrous, edged with small, nonsticky, short-stalked glands. *Corolla* 4-lobed, ca. 1.2–1.8 × 2.5 mm, broadly cyathiform, colliculate, glabrous, white; lobes erect, very broadly triangular, subacute, minutely fimbriate to entire. *Stamens* 8, free, manifest; filaments 1 mm long, linear, straight, glabrous; anthers bilobed, dorsifixed near the base, oblong, erect, golden brown, muticous; thecae erect appressed, 0.8 × 0.25 mm, oblong, subfalcate, aculeate-edged and adaxially aculeate; pore ⅓–¼ the length of theca; pollen as tetrads. *Ovary* 4-locular, 0.6 × 0.9 mm, oblate, slightly emarginate, slightly 4-lobed, glabrous, rarely with a few short stiff hairs, white, with dark-red nectaries around the base; ovules 3 per locule, pendulous from an apical placenta; style manifest, erect, straight, 0.9–1.2 mm long, terete, glabrous; stigma simple-truncate. *Fruit* a dehiscent capsule, 1.4 × 2.0 mm, cyathiform, with small apical placenta and remnant style-base, valves fused for $\frac{1}{10}$ their length, spreading, septa only on the columella; *seeds* 0.8 × 0.5 mm, cuneate, trigonous, complanate, with subapical beak at point of attachment, reticulate-areolate, brown, cells irregularly subequal with straight anticlinal walls and numerous pits.

Diagnostic features and discussion. *Erica hebdomadalis* is characterized by its low sprawling habit (maximum height 0.25 m), pendulous flowers with broadly cyathiform glabrous corolla, manifest anthers, and equally long style. It is most closely allied to *E. demissa* Klotzsch ex Bentham, which has an erect habit up to 1.5 m high, erect to spreading flowers, mostly urceolate and glabrous or puberulous, well-exserted anthers and style (the latter much longer than the anthers), and similar indumentum on the branches but at times having numerous plumose gland-tipped hairs admixed. Stokoe (*S.1757* in NBG) specifically noted that the species "flowers downward."

Erica demissa is a variable and complex species. It occurs at low altitudes and is widespread and common on the mountains from the Cedarberg in the northwest through the Klein Karoo to the Van Stadens area near Port Elizabeth in the east, whereas the new species occurs above 2000 m and only on the Klein Swartberg.

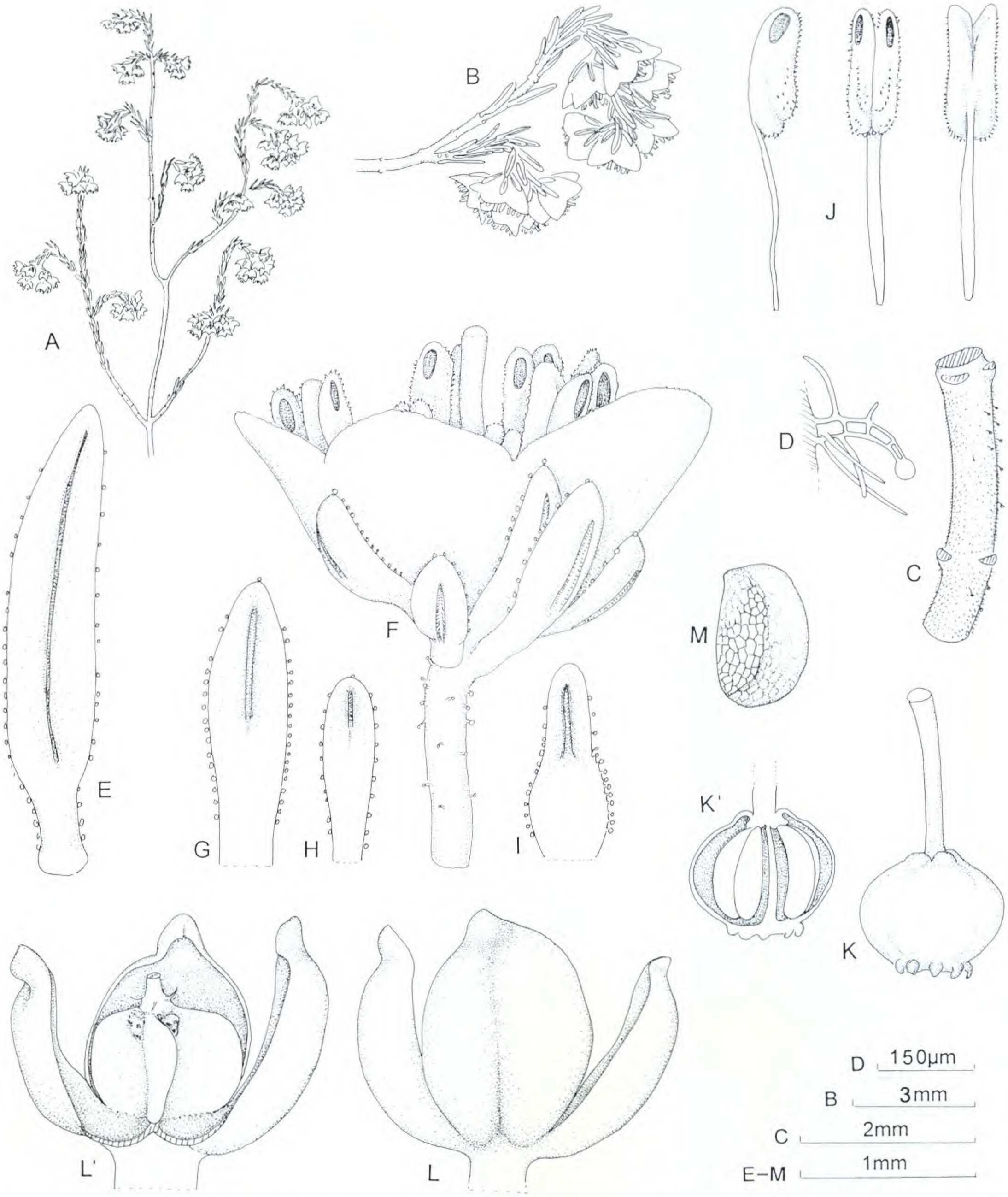

Figure 1. *Erica hebdomadalis* E. G. H. Oliver & I. M. Oliver. —A. Branch, natural size. —B. Flowering branchlet. —C. Branch. —D. Branch trichome. —E. Leaf. —F. Flower. —G. Bract. —H. Bracteole. —I. Sepal. —J. Stamen, lateral, ad- and abaxial views. —K. Gynoecium. —K'. Ovary, opened laterally. —L. Capsule. —L'. Capsule, with one valve removed. —M. Seed. All drawn from the type collection, *Oliver 10005* (del. Inge Oliver).

Erica hebdomadalis was first collected by a team of three amateur collectors, H. K. C. Andreae, R. Primos, and T. P. Stokoe, who were the first to visit the highest mountains in the Western Cape in 1928. The type material was collected during a field trip of 13 botanists to study the high-altitude flora of these mountains in 1992 (Linder et al., 1993; McDonald et al., 1993). This is the second species of *Erica* to be described from this trip, the other being the showy and very distinctive *E. roseoloba* E. G. H. Oliver (Oliver & Oliver, 1996).

Distribution and habitat. The species is restricted to the highest parts at the eastern end of the Klein Swartberg mountains toward Seven Week's Poort, where it is quite common on the drier northern slopes and plateau. Andreae and Stokoe re-

corded the species on Seven Week's Poort Mtn. as common and spreading over rocks, with Esterhuysen noting the plants occurring "around bases of rocks." The plants studied on nearby Hoeko Peak (E. G. H. O.) were low and spreading over small rocks and between the very short tussocks of Restionaceae. The general vegetation was very low and alpine-like due to the high altitude (2000–2300 m), where conditions can be extreme, from hot and dry in summer to very cold with snow in winter.

No pollinators were noted visiting the plants during the field trip, despite insects visiting other species of *Erica* flowering in the area. It is postulated that the new species is insect-pollinated. This is based on the possession of nectaries and a simple-truncate stigma (Rebelo et al., 1985).

The species is named after the region where it grows, Seven Week's Poort (Greek, hebdomas = seven, week; Latin, hebdomadalis = of a week; thus covering both aspects of the name). Early records suggest that it took the first travelers seven weeks to negotiate the passage (poort) through this mountain range by oxwagon. Compton's species, *E. ostiaria*, is named after the poort (Latin, ostiarius = belonging to a passage).

Paratypes. SOUTH AFRICA. **Western Cape:** 3321, (-AD), Klein Zwartberg, W of Klein Zwartberg Peak, 6500 ft., 28 Dec. 1928, *Andreae 1281* (BOL); Seven Week's Poort Mtn., upper part of N slopes, 7300 ft., 30 Dec. 1928, *Andreae 1290* (BOL), 2000 m, 25 Dec. 1928, *Stokoe 1757* (NBG), Dec. 1928, *Stokoe 6233* (BOL), neck W of Mtn., towards Steenslangberg, 6000 ft., 14 Apr. 1979, *Esterhuysen 35206* (BOL).

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